



[600.1175]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Re: Application of: John Sheridan RICHARDS
Serial No.: 10/015,957
Filed: 12/13/2001
For: PRECOLLECT METHOD AND DEVICE
Art Unit: 2854
Examiner: Jill E. Culler

Mail Stop: APPEAL
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

June 23, 2004

APPELLANTS' BRIEF UNDER 37 C.F.R. § 1.192

Sir:

Appellants submit this brief for the consideration of the Board of Patent Appeals and Interferences (the "Board") in support of their appeal of the Final Rejection dated October 7, 2003 in this application. An original and two copies of this brief are submitted herewith. The statutory fee of \$330.00 is paid concurrently herewith.

1. REAL PARTY IN INTEREST

The real party in interest is Heidelberger Druckmaschinen AG, a German corporation having a place of business at Kurfuersten-Anlage 52-60, D-69115 Heidelberg, Germany, the assignee of the entire right, title and interest in the above-identified patent application. The invention was assigned by inventor John Sheridan

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Richards to Heidelberger Druckmaschinen AG. The assignment was recorded on March 4, 2002 at reel 012688/ frame 0540.

2. RELATED APPEALS AND INTERFERENCES

Appellants, their legal representatives, and assignee are not aware of any appeal or interference that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.

3. STATUS OF CLAIMS

Claims 1, 3 to 8, 10 to 17, 19 and 20 are pending. Claims 1, 3 to 8, 10 to 17, 19 and 20 have been finally rejected as per the Final Office Action dated October 7, 2003. Claims 2, 9 and 18 have been canceled.

The rejection to claims 1, 3 to 8, 10 to 17, 19 and 20 thus is appealed. A copy of appealed claims 1, 3 to 8, 10 to 17, 19 and 20 is attached hereto as Appendix A.

4. STATUS OF AMENDMENTS AFTER FINAL

No amendments after final were made.

5. SUMMARY OF THE INVENTION

The present invention provides a method for combining folios between a first (e.g., 1 in Fig. 2, see, e.g., specification paragraph [0026]) and a second web (e.g., 2 in Fig. 2, see, e.g., specification paragraph [0026]) in a rotary printing press, the method comprising: cutting a first folio (e.g., A3 in Fig. 1b and at point z in Fig. 2, see, e.g., specification paragraph [0027]) from a third web (e.g., 3 in Fig. 2, see, e.g., specification paragraph [0026]) in the rotary press; storing the first folio (e.g., A3 in Fig. 1b and at point z in Fig. 2, see, e.g., specification paragraph [0027]) on a storage device (e.g., 12 in Fig. 2, see, e.g., specification paragraph [0026]); transferring the first folio (e.g., A3 in Fig. 1b and at point z in Fig. 2, see, e.g., specification paragraph [0027]) from the storage device (e.g., 12 in Fig. 2, see, e.g., specification paragraph [0026]); to a position between the first (e.g., 1 in Fig. 2, see, e.g., specification paragraph [0026]) and second webs (e.g., 2 in Fig. 2, see, e.g., specification paragraph [0026]);

[0026]); and cutting a second folio (e.g., A2 in Fig. 1b and at point z, showing the two folios, see, e.g., specification paragraph [0027]) from the third web (e.g., 3 in Fig. 2, see, e.g., specification paragraph [0026]); the storing step including storing the second folio (e.g., A2 in Fig. 1b, see, e.g., specification paragraph [0022]) in a stacked relationship relative to the first folio (e.g., A3 in Fig. 1b and at point z, see, e.g., specification paragraph [0026]) on a precollect cylinder (e.g., 14 in Fig. 2, see, e.g., specification paragraph [0026]) of the storage device (e.g., 12 in Fig. 2, see, e.g., specification paragraph [0026]); the transferring step including simultaneously transferring the stacked first (e.g., A3 in Fig. 1b, see, e.g., specification paragraph [0028]) and second folios (e.g., A2 in Fig. 1b, see, e.g., specification paragraph [0028]) from the precollect cylinder (e.g., 14 in Fig. 2, see, e.g., specification paragraph [0026]) to the position between the first (e.g., 1 in Fig. 2, see, e.g., specification paragraph [0028]) and second webs (e.g., 2 in Fig. 2, see, e.g., specification paragraph [0028]).

The present invention also provides a device for combining folios between first (e.g., 1 in Fig. 2, see, e.g., specification paragraph [0026]) and second webs (e.g., 2 in Fig. 2, see, e.g., specification paragraph [0026]) in a rotary printing press. The device includes a cutting cylinder (e.g. 11 in Fig. 2, paragraph [0026]) configured to cut a first folio (e.g., A3 in Fig. 1b, see, e.g., specification paragraph [0028]) and a second folio (e.g., A2 in Fig. 1b, see, e.g., specification paragraph [0028]) from a third web (e.g., 3 in Fig. 2, see, e.g., specification paragraph [0026]); a storing device (e.g. 12 in Fig. 2, see, e.g., specification paragraph [0026]) in operative connection with the cutting cylinder, the storing device including a precollect cylinder (e.g. 14 in Fig. 2, see, e.g., specification paragraph [0026]) configured to store the first and second folios in a stacked relationship; and a positioning device (e.g. 17 in Fig. 2, see, e.g., specification paragraph [0028]) adjacent the storing device configured to transfer the stored first folio and second folio from the storing device to a position between the first and second webs.

6. ISSUES

Whether claims 1, 3, 8, 10, 14, 16, 17 and 20 should be rejected under 35 U.S.C. § 103(a) as being unpatentable U.S. Patent No. 2,385,659 to Tornberg in view of U.S. Patent No. 4,381,106 to Loebach. Whether claims 4, 13 and 19 should be rejected under 35 U.S.C. § 103(a) as being unpatentable over Tornberg in view of Loebach as applied to claims 1, 3, 8, 10, 14, 16, 17 and 20, and further in view of U.S. Patent No. 1,968,630 to Barber. Whether claims 5, 6, 11 and 12 should be rejected under 35 U.S.C. § 103(a) as being unpatentable over Tornberg in view of Loebach as applied to claims 1, 3, 8, 10, 14, 16, 17 and 20, and further in view of U.S. Patent No. 4,564,470 to Schmitt. Whether claims 7 and 15 should be rejected under 35 U.S.C. § 103(a) as being unpatentable over Tornberg in view of Loebach as applied to claims 1, 3, 8, 10, 14, 16, 17 and 20, and further in view of U.S. Patent No. 4,015,837 to Ostler.

7. GROUPING OF CLAIMS

Since the claims do not stand or fall together, the following groupings are appropriate:

Group I: Claim 1, 3, 17 and 20

Group II: Claim 4 and 19

Group III: Claims 5 and 6

Group IV: Claim 7

Group V: Claims 8, 10, 12, 13 and 14; and

Group VI: Claim 11.

8. ARGUMENTS

Group I: Claims 1, 3, 17 and 20

Claims 1, 3, 17 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable U.S. Patent No. 2,385,659 to Tornberg in view of U.S. Patent No. 4,381,106 to Loebach.

Tornberg discloses a web fed printing machine in which two printed webs W and W1 are superimposed before longitudinally folding the webs. Sheets which have been cut from a third web W2 are sandwiched between the two superimposed webs before the folding process, using a special speed sheet accelerating mechanism. When the sheet accelerating mechanism is used, the web W2 is run at half speed and the sheets are spaced apart, so that the webs W and W1 contact each other only sent to every other. See page 3, col. 2, line 47 to page 4, col. 1, line 10 of Tornberg. The sheets from web W2 are glued to web W.

Loebach teaches a folder collect cylinder 22 which is located within a folding apparatus and which collects intermediate products.

Claim 1 recites a method for combining folios between a first and second web in a rotary printing press, the method comprising:

cutting a first folio from a third web in the rotary press;

storing the first folio on a storage device;

transferring the first folio from the storage device to a position between the first and second webs; and

cutting a second folio from the third web;

the storing step including storing the second folio in a stacked relationship relative to the first folio on a precollect cylinder of the storage device;

the transferring step including simultaneously transferring the stacked first and second folios from the precollect cylinder to the position between the first and second webs.

Tornberg admittedly does not disclose:

“the storing step including storing the second folio in a stacked relationship relative to the first folio on a precollect cylinder of the storage device;

the transferring step including simultaneously transferring the stacked first and second folios from the precollect cylinder to the position between the first and second webs.”

Tornberg does not stack folios at all.

Loebach teaches a collect cylinder.

However, it is respectfully submitted that one of skill in the art would not have found it obvious to modify Tornberg to add a collect cylinder for at least the following reasons:

1. The whole goal of Tornberg is to avoid collect cylinders using a special half-speed cut and acceleration mechanism with linearly moving chains 103, 104 and pins 116, 117 (See page 3, col. 1., for example). Tornberg also states: “In a collect operation, plates on diametrically opposed sides of the printing cylinders are different.

Since the size of the product may vary from day to day, the necessity for changing the product size in four-page jumps is quite a serious handicap.” Page 1, col. 1, lines 33 to 40. It further states: “According to the present invention, the odd sheet is completely cut from the half speed web and positively accelerated to full web speed.”

Page 1, col. 2, lines 35 to 39. It is respectfully submitted that the acceleration mechanism of Tornberg would not have been modified by one of skill in the art to include a precollect cylinder, whether of Loebach or another, as the whole purpose of the acceleration mechanism for the half speed sheets is to avoid the disadvantages of

precollect cylinders. See Tornberg at page 2, col. 2, line 57 et seq. Tornberg thus actually teaches away from using precollect cylinders.

2. Tornberg pastes the accelerated single sheet to web W, which would not work with an inserted collected folio in a stacked relationship. See Tornberg at page 3, col. 2 line 29 et seq.

3. There would have been no motivation to provide a stacked product to the Tornberg device, as there is no need or desire for providing a precollect cylinder to the Tornberg device.

Withdrawal of the rejection to claims 1 and 17 and their dependent claims thus is respectfully requested.

Group II: Claims 4 and 19

Claims 4 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tornberg in view of Loebach as applied to claim 1, and further in view of U.S. Patent No. 1,968,630 to Barber.

Barber discloses collecting four webs and then cutting them.

Claim 4 recites the method as recited in claim 1 further comprising:

cutting a third folio from a fourth web; and

cutting a fourth folio from the fourth web, and wherein the storing step further includes storing the third and fourth folios in a stacked relationship relative to one another and relative to the first and second folios on the precollect cylinder, and wherein the transferring further includes simultaneously transferring the stacked first, second, third, and fourth folios from the precollect cylinder.

Barber does not disclose stacking four folios and then transferring them between two webs. Nor is any motivation provided for altering the proposed combination of Torneberg and Loebach.

Withdrawal of the rejection with respect to claim 4 for this reason as well is respectfully requested.

Group III: Claim 5 and 6

Claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tornberg in view of Loebach as applied to claim 1, and further in view of U.S. Patent No. 4,564,470 to Schmitt.

Schmitt discloses a standard folder assembly for cutting a web, but does not disclose any precollect cylinder for transferring products between two moving webs.

Claim 5 recites the method as recited in claim 1 wherein the precollect cylinder has a circumference three times a circumference of the first folio.

It is respectfully submitted that one would not have found it obvious to have modified the proposed combination of Tornberg and Loebach to provide the cylinder of Schmitt, as Schmitt is solely downstream of a fully cut web, and any collection is done after the webs are all cut.

Withdrawal of the rejection under 35 U.S.C. 103 to claims 5 and 6 for this reason as well is respectfully requested.

Group IV: Claim 7

Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Tornberg in view of Loebach as applied to claim 1 and further in view of U.S. Patent No. 4,015,837 to Ostler.

Ostler discusses providing an electrostatic charge to supplements.

Claim 7 recites the method as recited in claim 1 further comprising providing an electrostatic charge to at least one of the first web, the second web, the first folio, and the second folio so as to enable an adhesion between the first and second folios and at least one of the first and second webs.

Loebach provides glue to a single insert, and it is respectfully submitted that there would have been no need or motivation on the part of one of skill in the art to have provided a more complicated means to the Loebach device, other than the hindsight of the present invention. The Office Action motivation of "better adhesion" is unsupported: glue can provide at least as good adhesion.

Withdrawal of the rejection to claim 7 is also respectfully requested for this

reason as well.

Group V: Claims 8, 10, 12, 13, 14 and 16

Claims 8, 10, 14 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable U.S. Patent No. 2,385,659 to Tornberg in view of U.S. Patent No. 4,381,106 to Loebach. Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Tornberg in view of Loebach as applied to claim 8, and further in view of U.S. Patent No. 4,564,470 to Schmitt. Claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Tornberg in view of Loebach as applied to claim 8, and further in view of U.S. Patent No. 1,968,630 to Barber.

Claim 8 recites a device for combining folios between first and second webs in a rotary printing press, the device comprising:

- a cutting cylinder configured to cut a first folio and a second folio from a third web;

- a storing device in operative connection with the cutting cylinder, the storing device including a precollect cylinder configured to store the first and second folios in a stacked relationship; and

- a positioning device adjacent the storing device configured to transfer the stored first folio and second folio from the storing device to a position between the first and second webs.

The Office Action states that it would have been obvious to have used a precollect cylinder in place of the storing device. It is not clear what is the storing device identified by the Office Action- it cites to the same tapes 119 as the purported positioning device.

In any event, the tapes or accelerating device of Tornberg would not have been replaceable by a collect cylinder, as the sheets must be accelerated.

Withdrawal of the rejection to claim 8 and its dependent claims is respectfully requested.

Group VI: Claim 11

Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Tornberg in view of Loebach as applied to claim 1, and further in view of U.S. Patent No. 4,564,470 to Schmitt.

Schmitt discloses a standard folder assembly for cutting a web, but does not disclose any precollect cylinder for transferring products between two moving webs.

Claim 5 recites the device as recited in claim 8 wherein the precollect cylinder has a circumference that is equal to a length of one of three folios, five folios, and seven folios.

It is respectfully submitted that one would not have found it obvious to have modified the proposed combination of Tornberg and Loebach to provide the cylinder of Schmitt, as Schmitt is solely downstream of a fully cut web, and any collection is done after the webs are all cut.

Withdrawal of the rejection under 35 U.S.C. 103 to claim 11 for this reason as well is respectfully requested.

Respectfully submitted,

DAVIDSON, DAVIDSON & KAPPEL, LLC

By: 

William C. Gehris
Reg. No. 38,156

DAVIDSON, DAVIDSON & KAPPEL, LLC
485 Seventh Avenue, 14th Floor
New York, NY 10018
Tel: (212) 736-1940
Fax: (212) 736-2427

APPENDIX A:

PENDING CLAIMS 1, 3 to 8, 10 to 17, 19 and 20 OF U.S.
APPLICATION SERIAL NO. 10/015,957

Claim 1 (previously presented): A method for combining folios between a first and a second web in a rotary printing press, the method comprising:

cutting a first folio from a third web in the rotary press;

storing the first folio on a storage device;

transferring the first folio from the storage device to a position between the first and second webs; and

cutting a second folio from the third web;

the storing step including storing the second folio in a stacked relationship relative to the first folio on a precollect cylinder of the storage device;

the transferring step including simultaneously transferring the stacked first and second folios from the precollect cylinder to the position between the first and second webs.

Claim 3 (original): The method as recited in claim 1 further comprising moving the first, second, and third webs through the press at a same speed.

Claim 4 (previously presented): The method as recited in claim 1 further comprising:

cutting a third folio from a fourth web; and

cutting a fourth folio from the fourth web, and wherein the storing step further includes storing the third and fourth folios in a stacked relationship relative to one another and relative to the first and second folios on the precollect cylinder, and wherein the transferring further includes simultaneously transferring the stacked first, second, third, and fourth folios from the precollect cylinder.

Claim 5 (previously presented): The method as recited in claim 1 wherein the precollect cylinder has a circumference three times a circumference of the first folio.

Claim 6 (original): The method as recited in claim 1 wherein the cutting step is performed using a cutting cylinder having a circumference that is one-half a circumference of a print cylinder of the press.

Claim 7 (original): The method as recited in claim 1 further comprising providing an electrostatic charge to at least one of the first web, the second web, the first folio, and the second folio so as to enable an adhesion between the first and second folios and at least one of the first and second webs.

Claim 8 (previously presented): A device for combining folios between first and second webs in a rotary printing press, the device comprising:

- a cutting cylinder configured to cut a first folio and a second folio from a third web;

- a storing device in operative connection with the cutting cylinder, the storing device including a precollect cylinder configured to store the first and second folios in a stacked relationship; and

- a positioning device adjacent the storing device configured to transfer the stored first folio and second folio from the storing device to a position between the first and second webs.

Claim 10 (previously presented): The device as recited in claim 8 wherein the positioning device is configured to transfer the stacked first and second folios simultaneously.

Claim 11 (previously presented): The device as recited in claim 8 wherein the precollect cylinder has a circumference that is equal to a length of one of three folios, five folios, and seven folios.

Claim 12 (previously presented): The device as recited in claim 8 wherein the first and second folios are printed from a printing plate of the printing press .

Claim 13 (previously presented): The device as recited in claim 8 wherein the precollect cylinder includes pins for holding the first and second folios against a circumference of the precollect cylinder.

Claim 14 (previously presented): The device as recited in claim 8 wherein the precollect cylinder includes grippers for holding the first and second folios against a circumference of the precollect cylinder.

Claim 15 (original): The device as recited in claim 8 further comprising an electrode for providing an electrostatic charge to at least one of the first web, the second web and the first folio so as to enable an adhesion between the first folio and at least one of the first and second webs.

Claim 16 (original): The device as recited in claim 8 wherein the positioning device includes a belt mounted on a plurality of belt rollers.

Claim 17 (previously presented): A web product moveable in a rotary printing press, the web product comprising:

- a first web;
- a second web;
- a first folio cut from a third web, wherein the first folio is sandwiched between the first and second webs; and
- a second folio cut from the third web stacked relative to the first folio and sandwiched between the first and second webs.

Claim 19 (previously presented): The web product as recited in claim 17 further comprising:

- a third folio and a fourth folio, wherein the third and fourth folios are stacked relative to each other and relative to the first and second folios and sandwiched between the first and second webs.

Claim 20 (previously presented): The web product as recited in claim 17 wherein the stacked first and second folios are aligned with a respective folio image of at least one of the first and second webs.